

# Eastern Bering Sea 2018 Report Card

- The eastern Bering Sea was characterized by **anomalously warm conditions** in 2018. The PDO was slightly positive with a decline to near zero in summer 2018. **~70% chance of El Niño conditions** are predicted for the winter of 2018-2019. The North Pacific Index was strongly positive from fall 2017 into 2018.
- The northern Bering Sea experienced an **unprecedented near-complete lack of sea ice** in 2018; the southeastern Bering Sea had no sea ice and **no cold pool**.
- Acoustic estimates of euphausiid density increased slightly in summer 2018 from 2016, but **remains relatively low**. The 2018 value is similar to what was observed in 2004.
- The biomass of benthic foragers **dropped in 2018** (2<sup>nd</sup> lowest value in the timeseries). The decline was due to Yellowfin sole (31%) and Northern rock sole (19%). **Northern rock sole have declined steadily since 2010**.
- The biomass of motile epifauna remains **above the long-term mean**, with an increasing trend in the past 4 years. Urchins, sand dollars, and cucumbers are above their long-term mean, with a 29% increase from 2017–2018. **Opilio crab increased 100% while King crab decreased 29% from 2017–2018**.
- The biomass of pelagic foragers **remains below its mean** in 2018. Similar to 2017, a large increase in Pacific herring (80%) was off-set by a decrease in Capelin (91%). Jellyfish increased 204% and Atka mackerel increased 710%. **Pollock have decreased 59% since 2014, with a 38% decrease from 2017 to 2018**.
- The biomass of fish apex predators remains at its mean, but has been **trending downwards since 2014**. This decline is driven by a **54% reduction in Pacific cod biomass** (19% decline from 2017 to 2018). Sablefish have increased since 2014 with a 173% increase from 2017 to 2018. Arrowtooth flounder biomass increased 23% from 2017 to 2018.
- The multivariate seabird breeding index remains below the long term mean, indicating that overall, **seabirds bred later and had poor reproductive success in 2018**. Some murrelets did well reproductively, but the number of birds breeding was low and many were late in their reproductive efforts. This pattern may reflect a mismatch in timing of breeding and prey availability and/or that only high-quality breeders attempted to nest this year.
- Northern fur seal pup production at St. Paul Island in 2018 is approximately 6% less than the 2016 estimate. Pup production has been **declining at St. Paul Island at an approximate annual rate of 4.0%** since 1998.
- Seafloor habitat disturbance due to fishing gear (pelagic and non-pelagic trawl, longline, and pot) shows **interactions have remained below the long-term average** since 2011.

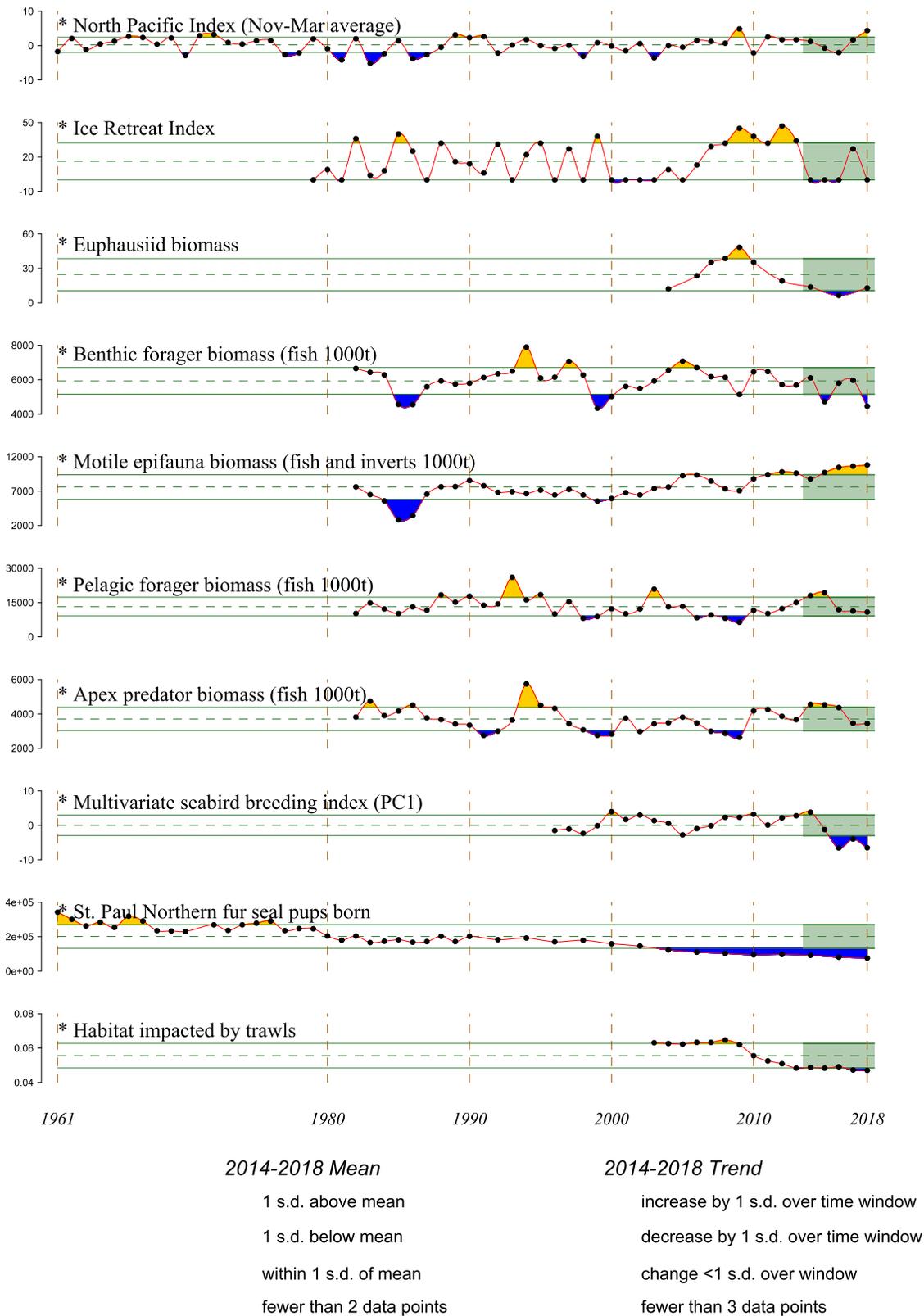


Figure 1: Eastern Bering Sea ecosystem assessment indicators; see text for descriptions. \* indicates time series updated in 2018.